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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,350

08/30/2006

Gay Joyce Cornelius

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EXAMINER

ASDJODI, MOHAMMAD REZA

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,350	<b>Applicant(s)</b> CORNELIUS ET AL.	
	<b>Examiner</b> MOHAMMAD ASDJODI	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

*The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:*

***(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.***

Claims 1, 3-5, 8-16, 18, 19, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vinci et al. (US 6,124,253).

Regarding claims 1, and 4, Vinci teaches an aqueous metal cleaning composition, [abstract], containing 5.0 w% to about 50w% N-alkyl pyrrolidone; [C.7, L.13], and hydrocarbons, [C.10, L.5-10, C.23, L.3-5], and water by the amount of 20-80%, [C.9, L.52-60],

With respect to equilibrium between the components of the chemical system, and resulting effects (Marangoni) due to density, vapor pressure and surface tension differences, change in concentration or weight percentage of components of equilibrium (e.g. phase diagram) is an expected occurrence with predictable consequences. Under some circumstances, however, such changes may impart patentability to a composition if the particular claimed range, or percent, produce a new and unexpected result which is different in kind and not merely in degree from the result of prior art. A prima facie case of obviousness may be rebutted, however, where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good, *In re Boesch and*

*Slaney*, 205 USPQ 215, [MPEP 2441.05]. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to optimize the amount of ingredients of an equilibrium system with the motivation of optimizing the composition for a specific cleaning purpose or specific surface to be cleaned.

Regarding claim 3, Vinci teaches using a hydrocarbon containing compound with chain length of 9 to 11 carbon atoms in the composition, [C.21, L.50].

Regarding claim 5, and 6, Vinci teaches a cleaning method which is used on soiled material, [C.16, L.25-35], wherein the composition is applied to a surface for cleaning soil contaminants; [C.4, L.19-21, C.11, L.5].

Regarding claim 8, Vinci teaches alkyl-2-pyrrolidone as being N-octyl pyrrolidone surfactant, [C.8, L.20-25 & C.21, L.60].

Regarding claims 9-11, Vinci teaches a hydrocarbon surfactant mixtures comprising carbon chain length of 9 to 11 carbon atoms, [C.3, L.5 & C.21, L.50].

Regarding claims 12 and 13, and 15, Vinci teaches 1-alkyl-2-pyrrolidone by the amount of 5-50%; [C.7, L.13], water by the amount of 20-80%; [C.9, L.55-60], and hydrocarbon; [C.10-L.7-10, C.23, L.3-5].

Vinci does not teach exact w% of hydrocarbon. At the time of invention, it would have been obvious to a person of ordinary skill in the art to adjust the amounts of hydrocarbon, 1-alkyl-2-pyrrolidone, and water to optimize the cleaning ability of this composition. Motivation would have been to optimize the concentrations of each component toward more effective cleaning solution with respect to a given surface.

Regarding claim 14, Vinci discloses a plurality of hydrocarbon containing ingredients present in the composition, [C.23, L.5-10].

With regard to claim 16, Vinci discloses using of electrolytes such as sodium carbonate and sodium bicarbonate in his composition, [C.22, L.40-65].

Regarding claim 18 and 19, the Office realizes that all the claimed effects or physical properties, such as number of phases, are not positively stated by the reference. However, the reference teaches the claimed reagents. Therefore, the claimed effects and physical properties (number of liquid phases) would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be presented to support applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties and effects with only the claimed ingredients.

Claim 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vinci et al. (US 6,124,253), as applied to claims 1, above and further in view of Silvester et al. (6,150,318).

Regarding claim 7, Vinci et al. teaches the basic claimed composition as set forth above. Vinci et al. do not teach, even though apparent, presence of a container or a package with his composition. However Silvester, teaches use of a plastic aerosol container, [C.6, L.45-50]. Vinci and Silvester are analogous art because they are from the same field of endeavor in relation to cleaning composition and their containers

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(package). At the time of invention, it would have been obvious to a person of ordinary skill in the art to prepare a container or a package for storing the cleaning composition prior to use and while using it.

Regarding claim 17, Vinci et al. teach the basic claimed composition as set forth above. Vinci does not teach presence of a bleach in his composition. However, Sivester discloses the use of a bleach in this cleaning composition, and from the range of concentrations of constituents of this cleaner it is quite apparent that the amount of bleach is very minimal. Vinci and Silvester are analogous art because they are from the same field of endeavor in relation to cleaning compositions. At the time of invention, it would have been obvious to a person of ordinary skill in the art to add the needed amount of a bleach to prepare the cleaning solution with an added stain removing effect.

### ***Response to Arguments***

Applicant's arguments filed 01/22/2008 have been fully considered but they are not persuasive.

With regard to exhibition of self induced motility, after application of this composition on a surface, due to specific variations in concentrations of three-components responsible for equilibrium phase diagram, it is noteworthy to indicate the following. It is well known in the art that the Gibbs-Marangoni effect (e.g. tears of wine) is caused by factors such as concentration gradient, temperature gradient, surface tension gradient, density, or a cumulative and simultaneous combination of these

effects. The term self induced motility (which is more relevant in study of micro-organisms) is also a direct consequence of properties such as surface tension and vapor pressure in liquids. Any change in concentrations of components (e.g. solubility change due to salting out effect caused by electrolytes,...etc) would simply disturb an already established equilibrium of a given phase diagram, which in turn would lend itself to a new equilibrium position and new number of phases. Thus differences in density and vapor pressure are bound to manifest themselves by creating an observable behavior such as self-induced motility.

Regarding the desirability of a bleach toward a composition (e.g. Silvester's bleach) this is held to be evident that the action of bleaching compound is intended toward the surface to be cleaned and not the other chemical ingredients of the cleaning composition. Therefore bleach has to be present, or soluble without any change in its nature, in a phase that is compatible with (e.g. water). Thus this creates, chemically, no lack of desirability to readily mix with the cleaning composition.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. M. Reza Asdjodi whose telephone number is 571-270-3295. *The examiner can normally be reached on Monday-Friday 8:00-5:00 EST.*

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M. Reza Asdjodi,  
04/24/2008

/MARK EASHOO/  
Supervisory Patent Examiner, Art Unit 1796  
28-Apr-08